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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,820	04/27/2001	Toshiaki Yamada	YAMAH5.895AP	2189

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EXAMINER

VANAMAN, FRANK BENNETT

ART UNIT	PAPER NUMBER
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3618

DATE MAILED: 09/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/830,820

Applicant(s)

YAMADA ET AL.

Examiner

Frank Vanaman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-40 is/are pending in the application.
- 4a) Of the above claim(s) 15-20, 27-30 and 37-40 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-14 is/are allowed.
- 6) ☒ Claim(s) 21 and 31 is/are rejected.
- 7) ☒ Claim(s) 22-26 and 32-36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 07 July 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Status of Application

1. Applicant's amendment, filed July 7, 2003, has been entered in the application. Claims 10-40 are pending, claims 15-20, 27-30 and 37-40 are withdrawn from consideration.

Election/Restriction

2. Applicant's further arguments concerning the restriction requirement (made after the finality of the restriction requirement) have been carefully considered. Firstly, Applicant has made no arguments that the inventions are patentably indistinct, and as such, there is no evidence that the statutory basis for a restriction has not been satisfied. As regards the cited portions of the MPEP, the examiner acknowledges this citation, but further notes that applicant has not presented any evidence that the examination of multiple inventions, rather than the examination of a single invention, would not increase the burden on the examiner. The restriction requirement was made final in the previous office action and remains so.

Drawings

3. Applicant's submission of proposed drawing corrections is noted. The proposed corrected drawings have not been presented in the form of a pen-and-ink sketch showing changes in red ink or with the changes otherwise highlighted (MPEP § 608.02(v)), however they have been approved in that the changes are of such a nature as to be easily observed.

Claim rejections 35 USC 103

4. The pertinent portions of 35 USC §103 can be found in a previous office action.

5. Claims 21 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Early et al. (US 4,961,151) in view of Moroto et al. (US 5,892,346). Early et al. teach a power system for a vehicle including a load in the form of a propulsion device (16), three separate power supply sources (10, 12, 14) including batteries (e.g., 12, 14) and a fuel cell (10), each being configured to supply operating power to the load to drive

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the vehicle, and being connectable in various configurations (see tables I through IV), a controller (40) which can determine available power (through sensing devices 24, 28, 30) and having means to connect and disconnect the sources to the load (18, 18', 20, 20', 22, 22'). The reference to Early et al. fails to teach the controller as further being capable of calculating a travel range. Moroto et al. teach a vehicle configuration (having either a single electric source, or being a hybrid vehicle), which is capable of determining a battery state of charge and consumption of battery capacity based on driving, and determining a range at beyond which charging of the battery would be required (see figs. 4-7 and 9, for example). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a distance-to-next-charge (i.e., range) computing portion as taught by Moroto et al. to the vehicle power system taught by Early et al., monitoring a battery source, for the purpose of insuring the operator is aware of the possible range of the vehicle prior to attempting a trip. The reference of Moroto et al. fails to specifically teach the monitoring of a pair of battery sources, however the duplication of existing parts for the purpose of increasing an effect, in this case monitoring a second separate battery source, as Early et al. teach a pair of battery sources rather than a single source, would not be deemed beyond the skill of the ordinary practitioner, for the purpose of insuring that both sources are monitored, allowing an accurate representation of the capacity of the vehicle.

As regards the specific provision of a vehicle body, the Examiner hereby takes Official Notice that it is very old and well known to provide a body on a vehicle, for example, for the purpose of accommodating the passengers and it would not be at all beyond the skill of the ordinary practitioner to include a body portion to the vehicle taught by Early et al. as modified by Moroto et al. in order to accommodate the driver and passengers.

Allowable Subject Matter

6. Claims 10-14 are allowed.

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7. Claim 22-26 and 32-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's comments, filed with the amendment, have been carefully considered. As regards the reference of Moroto et al. and the analysis of a capacity consumption ratio of a fuel cell, the examiner agrees that Moroto et al. fail to specifically teach such a limitation, and further notes that the claims directed to this subject matter are no longer being rejected by the combination of the references to Early et al. and Moroto et al. (see above). As regards the provision of first and second sources, note that Early teaches three sources (10, 12, 14), and while Moroto teaches only a single battery analysis mechanism, it is not deemed to be beyond the skill of the ordinary practitioner to duplicate existing taught elements and or functions, such as the mechanism taught by Moroto et al. to analyze the remaining capacity of a single battery, for example to analyze and determine the remaining capacity of a second battery, to accommodate a pair of batteries, which may correspond to first and second different power sources, to the breadth claimed.

Conclusion

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 703-308-0424. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is 703-308-1113.

As of May 1, 2003, any response to this action should be mailed to:

Mail Stop _____
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Or faxed to the Office-wide central fax:
703-872-9306

The previously used fax numbers may still be used:
703-305-3597; 703-305-7687;
although they now connect to the central fax location.

F. VANAMAN
Primary Examiner
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9/11/03